

IN THE CLAIMS

1. (PREVIOUSLY PRESENTED) A coating composition for an implantable medical device comprising a combination of a bioactive material and a vehicle therefor, wherein the vehicle comprises a first compound and a second compound,

wherein the first compound is a random copolymer of Formula 1:



wherein A is a vinyl acetal group, B is a vinyl alcohol group and C is a vinyl acetate group and wherein $x > 0$ and $x + y + z = 1$,

and the second compound comprises a polymer of Formula 2:



wherein D is a vinyl pyrrolidone group and E is a vinyl acetate group and wherein $0 \leq m \leq 1$ and $n + m = 1$; and

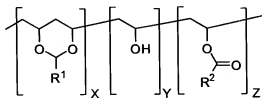
wherein the vehicle is configured to release the bioactive material when an implantable medical device onto which the coating is deposited is implanted.

2. (PREVIOUSLY PRESENTED) A composition as claimed in claim 1, wherein the second compound is comprises up to 80% by weight of the coating composition.

3. (PREVIOUSLY PRESENTED) A composition as claimed in claim 1, wherein n is from about 0.3 to 0.7 and m is from about 0.3 to 0.7.

4. (PREVIOUSLY PRESENTED) A composition as claimed in claim 1, wherein the second compound is poly(vinyl pyrrolidone-co-vinyl acetate) with an average Mw of about 50,000.

5. (PREVIOUSLY PRESENTED) A composition as claimed in claim 1, wherein $[A]_x-[B]_y-[C]_z$ is a compound of Formula 1A:



wherein R^1 and R^2 are independently selected from the group consisting of a hydrogen, alkyl, alkenyl, alkynyl and aryl group and wherein optionally the alkyl, alkenyl, alkynyl or aryl group may be substituted for any pendent hydrogen atom.

6. (PREVIOUSLY PRESENTED) A composition as claimed in claim 5, wherein x is from about 0.8 to 0.9, y is from about 0.1 to 0.2 and z is from about 0 to 0.025.

7. (PREVIOUSLY PRESENTED) A composition as claimed in claim 5, wherein the first compound is poly(vinylbutyral-co-vinyl alcohol-co-vinyl acetate) with an average Mw from about 50,000 to about 80,000 and with about 88 wt% vinyl butyral groups.

8. (PREVIOUSLY PRESENTED) A composition as claimed in claim 1, wherein the bioactive material is dexamethasone, rapamycin or 17β -Estradiol.

9. (PREVIOUSLY PRESENTED) A composition as claimed in claim 1, wherein the proportion of bioactive material to vehicle is from about 1:9 to about 1:1.

10. (WITHDRAWN, PREVIOUSLY PRESENTED) A method for coating a medical device comprising the step of:

(a) applying to at least a part of the medical device a first coating composition as claimed in any one of claims 1 to 9.

11. (WITHDRAWN, PREVIOUSLY PRESENTED) A method as claimed in claim 10 additionally comprising the step of:

(b) applying to at least a part of the medical device a second coating composition as claimed in any one of claims 1 to 9, wherein the first coating composition and the second coating composition are the same or different.

12. (WITHDRAWN, PREVIOUSLY PRESENTED) A method as claimed in claim 11, wherein the first coating composition has a vehicle comprising the first compound and the second compound in a ratio from about 80:20 to about 100:0 and wherein the second coating composition has a vehicle comprising the first compound and the second compound in a ratio from about 70:30 to about 94:6.

13. (WITHDRAWN, PREVIOUSLY PRESENTED) A method as claimed in claim 11, wherein the ratio of the first compound to the second compound is about 98:2 in the first coating composition and about 90:10 in the second coating composition.

14. (WITHDRAWN, PREVIOUSLY PRESENTED) A method as claimed claim 11, wherein the first coating composition includes rapamycin and the second coating composition includes dexamethasone.

15. (WITHDRAWN, PREVIOUSLY PRESENTED) A medical device comprising a first coating composition as claimed in any one of claims 1 to 9, wherein the first coating composition is applied directly to the medical device.

16. (WITHDRAWN, PREVIOUSLY PRESENTED) A device as claimed in claim 15 comprising a second coating composition (which is the same as or different to the first coating) as claimed in any one of claims 1 to 9, wherein the second coating composition is applied to at least a part of the first coating composition.

17. (WITHDRAWN, PREVIOUSLY PRESENTED) A device as claimed in claim 16 wherein the first coating composition has a vehicle comprising the first compound and the second compound in a ratio from about 80:20 to about 100:0 and wherein the second coating composition has a vehicle comprising the first compound and the second compound in a ratio from about 70:30 to about 94:6.

18. (WITHDRAWN, PREVIOUSLY PRESENTED) A device as claimed in claim 17, wherein the ratio of the first compound to the second compound is about 98:2 in the first coating composition and about 90:10 in the second coating composition.

19. (WITHDRAWN, PREVIOUSLY PRESENTED) A device as claimed in claim 16, wherein the first coating composition includes rapamycin and the second coating composition includes dexamethasone.

20. (WITHDRAWN, PREVIOUSLY PRESENTED) A device as claimed in claim 15 which is a stent or graft-stent.

21. (CANCELED)

22. (PREVIOUSLY PRESENTED) A vehicle for carrying a bioactive material, wherein the vehicle comprises a first compound and a second compound, wherein the first compound is a random copolymer of Formula 1:



wherein A is a vinyl acetal group, B is a vinyl alcohol group and C is a vinyl acetate group and wherein $x > 0$ and $x + y + z = 1$, and the second compound comprises a polymer of Formula 2:



wherein D is a vinyl pyrrolidone group and E is a vinyl acetate group and wherein $0 \leq m \leq 1$ and $n + m = 1$; and

wherein the vehicle is configured to release the bioactive material when an implantable medical device onto which the coating is deposited is implanted.

23. (PREVIOUSLY PRESENTED) A method of controlling release of a bioactive material from an implantable medical device, the method comprising:

coating an implantable medical device with coating composition comprising a combination of a bioactive material and a vehicle therefor, wherein the vehicle comprises a first compound and a second compound,

wherein the first compound is a random copolymer of Formula 1:



wherein A is a vinyl acetal group, B is a vinyl alcohol group and C is a vinyl acetate group and wherein $x > 0$ and $x + y + z = 1$,

and the second compound comprises a polymer of Formula 2:



wherein D is a vinyl pyrrolidone group and E is a vinyl acetate group and wherein $0 \leq m \leq 1$ and $n + m = 1$; and

wherein the vehicle is configured to release the bioactive material when an implantable medical device onto which the coating is deposited is implanted.